



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,216	10/22/2001	Sang-Min Bae	678-764 (P9994)	4980
28249	7590	09/20/2005	EXAMINER	
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553			KIM, KEVIN	
			ART UNIT	PAPER NUMBER
			2638	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/986,216

Applicant(s)

BAE ET AL.

Examiner

Kevin Y. Kim

Art Unit

2638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-24 is/are allowed.
- 6) ☒ Claim(s) 1,8-11,13,25,32,34 and 41-46 is/are rejected.
- 7) ☒ Claim(s) 2-7,12,26-31,33,35-40 and 47-52 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1,10,11,25,32,34,43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadri (US 6,690,652) in view of Proctor, Jr. ( US 6,925,070).

Claims 1,34

Sadri discloses a method of determining a data rate in a mobile station for a mobile communication system including a base station, comprising the steps of;

receiving the number of orthogonal codes, and

determining a data rate using the number of orthogonal codes, see col.8, line 67 – col.9, line 4.

Art Unit: 2638

Sadri fails to teach measuring CIR of the communication channel and determining a data rate corresponding to the measured CIR.

Proctor, Jr. teaches determining a data rate corresponding to signal to noise ratio such that an optimum data rate could be selected in the particular channel environment. Thus, it would have been obvious to one skilled in the art at the time the invention was made to control the data rate, that was determined based on the information of orthogonal codes to be used, corresponding to the channel quality such that an optimum data rate can be selected considering the signal to noise ratio of the channel, as taught by Proctor, Jr.

Claims 10,43.

Since both the base station and mobile station have to use the same data rate, it would have been obvious for the mobile station to transmit the information regarding the data rate to the base station.

Claim 11.

It would have obvious to set demodulation parameters corresponding to the determined data rate.

Claims 25,46

Sadri discloses a method of determining a data rate in a mobile communication system including a base station and a mobile station, comprising the steps of;  
receiving the number of orthogonal codes, and  
determining a data rate using the number of orthogonal codes, see col.8, line 67 – col.9, line 4.

Art Unit: 2638

Sadri fails to teach using the data rate corresponding to the measuring CIR of the communication channel by the mobile station to control the determined data rate.

Proctor, Jr. teaches determining a data rate corresponding to signal to noise ratio such that an optimum data rate could be selected in the particular channel environment. Thus, it would have been obvious to one skilled in the art at the time the invention was made to control the data rate, that was determined based on the information of orthogonal codes to be used, corresponding to the channel quality such that an optimum data rate can be selected considering the signal to noise ratio of the channel, as taught by Proctor, Jr.

Claim 32.

It would have obvious to set demodulation parameters corresponding to the determined data rate.

4. Claims 8,9,41,42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadri in view of Proctor, Jr., as applied to claim 1 above, further in view of Gopalakrishnan (US 6,859,446).

Sadri in view of Proctor, Jr. disclose all the subject matter claimed, as explained above, but for the orthogonal code allocation information being received from the base station.

Gopalakrishnan teaches the base station transmitting Walsh code information, i.e., orthogonal code allocation information, to mobile stations in order to inform the mobile stations of which Walsh codes to use for decoding data transmission. See col. 8, lines 23-26. Thus, it would have been obvious to one skilled in the art to have the mobile station described in the Proctor, Jr. patent to receive orthogonal code allocation

Art Unit: 2638

information from the base station for the purpose of informing the mobile station of orthogonal codes to be used for decoding transmission data as taught by Gopalakrishnan.

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 13,44,45 are rejected under 35 U.S.C. 102(e) as being anticipated by Dahlman et al (US 6,912,228).

Claims 13 and 44.

Dahlman et al describes a method of selecting a base station comprising measuring the signal quality of pilot signals from a plurality of base stations, determines data rates corresponding to the measured qualities of the respective base station and \

select a base station with the highest data rate and transmits a signal for selecting the determined base station. See col. 3, lines 1-8.

Claim 45.

Though not described, in order to select the highest data rate from determined plurality of data rates, a memory for storing the plurality of data rates is inherent.

Art Unit: 2638

7. Claims 2-7,12,26-31, 33, 35-40, 47-52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Allowable Subject Matter*

8. Claims 14-24 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y. Kim whose telephone number is 571-272-3039. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**KEVIN KIM**  
**PATENT EXAMINER**